

AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) An active noise control circuit comprising:

feed-forward control means for being supplied with a reference signal highly correlated to noise from a noise source and generating a noise cancellation signal which is out of phase to noise in the passenger compartment of a vehicle with a fixed roof;

canceling sound generating means disposed in the passenger compartment for generating a noise canceling sound in response to the noise cancellation signal from said feed-forward control means;

a microphone disposed in the passenger compartment of the vehicle with the fixed roof, the microphone being centrally located on ~~in the width direction of~~ the fixed roof of the vehicle and at an antinode of an acoustic normal mode of the passenger compartment, for detecting said noise of which sound pressure level is high, and for generating the reference signal; and

a noise cancellation-confirming microphone for confirming cancellation of the noise in the passenger compartment, and for generating an error signal;

wherein said feed-forward control means comprises means for lowering the levels of said error signal from said noise cancellation-confirming microphone with the noise cancellation signal; and

wherein said noise cancellation-confirming microphone is positioned in a vicinity of ears of occupants seated in the passenger compartment.

2. (Original) An active noise control circuit according to claim 1, wherein said antinode of the acoustic normal mode of the passenger compartment comprises an antinode in a primary mode or a secondary mode in a longitudinal direction of the passenger compartment.

3. (Previously Presented) An active noise control circuit according to claim 1, wherein said noise cancellation-confirming microphone comprises

a plurality of noise cancellation-confirming microphones being positioned respectively near laterally spaced roof rails of the vehicle in confronting relationship to the ears of occupants seated in the passenger compartment.

4. (Previously Presented) An active noise control circuit according to claim 1, wherein said noise cancellation-confirming microphone is positioned substantially centrally between laterally spaced roof rails of the vehicle in confronting relationship to the ear on the compartment side of an occupant seated in the passenger compartment.

5. (Original) An active noise control system according to claim 3 or 4, further comprising a microphone disposed near a central console in the passenger compartment.

6. (Currently Amended) An active noise control system comprising:
a microphone positioned in the passenger compartment of a vehicle having a fixed roof, the microphone being centrally located in the width direction of the fixed roof of the vehicle and at an antinode of a primary or secondary acoustic normal mode of the passenger compartment of the vehicle for detecting and canceling said noise of which sound pressure level is high;

canceling sound generating means disposed in the passenger compartment for generating a noise canceling sound;

a feedback control circuit for being supplied with an output signal from said microphone and generating an output signal to energize said canceling sound generating means; and

a storage box;

wherein said microphone and said feedback control circuit are housed together in said storage box, said feedback control circuit having an adjusting circuit for adjusting the amplitude and phase between a canceling sound generating means and the microphone, based on a transfer characteristic from said microphone, to generate a noise cancellation signal which is of the same sound pressure as, but out of phase to, noise at the microphone.

7. (Cancelled)

8. (Cancelled)

9. (Previously Presented) An active noise control system according to claim 6, wherein said storage box is disposed beneath a front seat in the passenger compartment.

10. (Previously Presented) An active noise control system according to claim 6, wherein said storage box has holes defined therein for the passage of noise in the passenger compartment.

11. (Previously Presented) The active noise control system according to claim 1, wherein frequency of said noise ranges from 20 to 120Hz.

12. (Previously Presented) The active noise control system according to claim 6, wherein frequency of said noise ranges from 20 to 120Hz.

13. (Previously Presented) The active noise control system according to claim 1, wherein frequency of said noise ranges from 40 to 80Hz.

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14. (Previously Presented) The active noise control system according to claim 6, wherein frequency of said noise ranges from 40 to 80Hz.